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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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CONLEY ROSE, P.C.			SORKIN, DAVID L	
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HOUSTON, TX 77253-3267			PAPER NUMBER	

1723

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/803,324

Applicant(s)

MORGENTHALER ET AL.

Examiner

David L. Sorkin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20-25 is/are rejected.
- 7) ☒ Claim(s) 19 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>06/2004 & 12/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-26, drawn to a tank with motor and shaft, classified in class 366, subclass 250.
 - II. Claim 27, drawn to a method of agitating, classified in class 366, subclass 348.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus could be used without the step of slowing the rotation of the agitation. In fact, the apparatus could involve a reciprocating agitator rather than a rotating agitator. Also, the method could be practiced without the "shaft" required by the apparatus claims, for example if a magnetic stirrer is involved.

3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

4. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required

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because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

5. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Derek V. Forinash on 05 September 2006 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-26. Affirmation of this election must be made by applicant in replying to this Office action. Claim 27 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. In independent claim 1, the scope of the claim is unclear due to the phrase "said fluid-free compartment". While the claim first recites that a compartment is "free of said fluid", the phrase "fluid-free compartment" would require that the compartment be free of any fluid. As the term "fluid" is considered to include gases and liquids, the phrase "fluid free compartment" contradicts the latter recitation that the compartment contains a pressurized gas. Similarly, in independent claim 6, recitation of "a fluid-free compartment" is contradicted by reciting that the compartment contains pressurized gas as well as a hydraulic motor.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Note that "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). This decision specifically relates to recitation of material level is a mixing chamber, and therefore is very similar to the instant application. Also, "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969) and "inclusion of material or article worked upon by a structure being

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claimed, does not impart patentability to the claims" *In re Otto* 136 USPQ 458, 459 (CCPA 1963).

12. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Wade (US 2,858,782). Regarding claim 1, Wade ('762) discloses an apparatus comprising a tank (10) capable of containing a fluid; and a vessel (30) within said tank, said vessel including a compartment that is free of said fluid; a motor (36) housed in said fluid-free compartment; and a shaft (34) connected to said motor and extending from said fluid-free compartment. Regarding claim 6, Wade ('762) discloses an apparatus comprising an enclosure (10) including a top; a vessel (30) having a fluid free compartment attached to said enclosure top; a motor (36) in the compartment; and a shaft (34) connected to said motor and extending out of said fluid free compartment (see Fig. 1).

13. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hausman (US 2,042,176). Regarding claim 1, Hausman ('176) discloses an apparatus comprising a tank (10,11) capable of containing a fluid; and a vessel within said tank, said vessel including a compartment (15) that is free of said fluid; a motor (18) housed in said fluid-free compartment; and a shaft (31,32) connected to said motor and extending from said fluid-free compartment. Regarding claim 6, Hausman ('176) discloses an apparatus comprising an enclosure (10,11) including a top (11); a vessel having a fluid free compartment (15) attached to said enclosure top; a motor (18) in the compartment; and a shaft (31,32) connected to said motor and extending out of said fluid free compartment (see drawing).

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14. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Jarvinen et al. (US 4,540,290). Regarding claim 1, Jarvinen ('290) discloses an apparatus comprising a tank containing a fluid (see col. 1, line 7, "tank containing liquid"); a vessel (15) within said tank, said vessel including a compartment that is free of said fluid; a motor (12) housed in said fluid free compartment; and a shaft (17) connected to said motor and extending from said fluid-free compartment and into said fluid. Regarding claim 2, said tank has an exterior that is in contact with air at an ambient art pressure, and where said fluid-free compartment is pressurized to a pressure exceeding the ambient air pressure (see col. 3, lines 21-23). Regarding claim 3, a source of compressed gas is located outside said tank and a conduit (9) extends between said compressed gas source and said fluid-free compartment adapted to communicate gas between said source of compressed gas and said fluid free compartment (see col. 2, lines 24-27).

15. Claims 1-5^{and}, 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Pflieger (US 2,186,494). Regarding claim 1, Pflieger ('494) discloses a tank (1) containing a fluid; a vessel (4) within said tank, said vessel including a compartment (an upper part of 4) that is free of said fluid; a motor (7,9) housed in said fluid free compartment; and a shaft (5 or 39 or 44 or 52) connected to said motor and extending from said fluid-free compartment said into said fluid. Regarding claim 2, said tank has an exterior that is in contact with air at an ambient air pressure, and wherein said fluid free compartment is pressurized to a pressure exceeding ambient air pressure (see the second column of page 4, lines 73-74). Regarding claim 3, a source (15,16) of

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compressed gas is located outside said tank and a conduit (14 or 60) extending between said compressed gas source and said fluid-free compartment is adapted to communicate gas between said source of compressed gas and said fluid-free compartment. Regarding claim 4, a level sensor (18,19 or 36 or 54 or 55 or 46 or 47) in said vessel is adapted to sense fluid level and to send an electrical signal to a controller (12,17,24) when fluid in said vessel rises to a predetermined level; said controller electrically coupled to said source of compressed gas and adapted to cause said source of compressed gas to communicate gas via said conduit to said fluid free compartment upon receipt of said signal from said level detector. Regarding claim 5, a pressure-relief valve (23) is electrically coupled to said controller and adapted to open to cause gas to escape said fluid-free compartment upon receipt of a control signal from said controller. Regarding claim 20, Pfleger ('494) discloses a vessel (4) having an opening (57 or 29 or 48) at a first end thereof; a control apparatus to keep fluid in said vessel below a predetermined level, said control apparatus comprising a controller (12,17,24); a compressor (15,16) adapted to supply pressurized gas to a pressurized region in the vessel upon receipt of a control signal from said controller; a first level detector (18,19 or 36 or 54 or 55 or 46 or 47) in said vessel to send a signal to said controller when said fluid level in said vessel rises to said first pre-determined level; and said compressor and said first level detector being electrically coupled to said controller (see Fig. 1). Regarding claim 21, two level detectors (for example 54 and 55 or 46 and 47) for different levels are in the vessel. Regarding claim 22, the means (15) to stop the compressor from supplying are disclosed. Regarding claim 23, a pressure relief valve

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(23) is electrically coupled to said controller and adapted to release gas from said pressurized region upon receipt of a signal from the controller.

16. Claims 1-3 and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Potter (US 2,034,419). Regarding claim 1, Potter ('419) discloses an apparatus comprising a tank (the lined or unlined bore as seen in Fig. 1 and other figures) containing a fluid; a vessel (3 and/or 16) within the tank, said vessel including a compartment that is free of said fluid; a motor (2) housed in said fluid-free compartment (see the second column of page 3, lines 69-72); and a shaft (see the second column of page 2, lines 1-5) connected to the motor. Regarding claim 2, said tank has an exterior that is in contact with air at an ambient pressure, and said fluid-free compartment is pressurized to a pressure exceeding ambient pressure (see the second column of page 2, lines 30-35). Regarding claim 3, a source (12,13) of compressed gas is located outside said tank and a conduit (14 or 31) extends between said compressed gas source and said fluid-free compartment and is adapted to communicate gas between said source of compressed gas and said fluid-free compartment. Regarding claim 6, Potter (US 2,034,419) discloses an enclosure (the lined or unlined bore as seen in Fig. 1 and other figures) including a top (see Fig. 1); a vessel (16) attached to said enclosure top and extending from said top; a fluid free compartment (for example 3) in said vessel; a motor (2) disposed in said fluid free compartment; and a shaft (see the second column of page 2, lines 1-5) connected to the motor. Regarding claim 7, a conduit (31) extends between said fluid free compartment and a location outside said enclosure, and means (12,13) supply gas through said conduit into the fluid free compartment. Regarding

claim 8, said enclosure has an exterior that is in contact with air at an ambient pressure, and said fluid free compartment is pressurized to a pressure exceeding ambient air pressure (see the second column of page 2, lines 30-35). Regarding claim 9, said means for supplying gas includes a gas compressor (12) located on top said enclosure. Regarding claim 10, an impeller (part of 1) is in said enclosure and mounted on said shaft outside of said vessel.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pflieger (US 2,186,494). The apparatus of Pflieger ('494) was discussed above. Pflieger ('494) further discloses a motor (7,9) disposed in said pressurized region connected to a rotatable shaft (5 or 39 or 44 or 52) which is connected to a pump (see the second column of page 1, lines 37-42). Although the structure of the pump is not disclosed, the fact that the pump is operated by a rotating shaft would have suggested that the pump have a plurality of blades connected to the shaft to one of ordinary skill in the art, to impel the liquid being pumped. Regarding claim 25, the controller is electrically coupled to the motor (see the first column of page 2, lines 34-36).

19. Claims 4, 5 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potter (US 2,034,419) in view of Pflieger (US 2,186,494). The

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apparatus of Potter ('419) was discussed above. While Potter ('419) does not explicitly state that a level detector is in said vessel, Potter ('419) does explain in the second column of page 4, lines 72-74, that the compressor may be controlled by a level detector. The details of such a system, such as the exact location of the level detector, are not disclosed. Pfleger ('494), also discussed above, teaches providing a level detector (18,19 or 36 or 54 or 55 or 37 or 46 or 47) in a vessel having a fluid free compartment, to control a pressurized gas source (15,16) via controller (17). It would have been obvious to one of ordinary skill in the art to have provided the level control mechanism and circuitry of Pfleger ('494) in the apparatus of Potter ('419) because Potter ('419) suggests having level control of the compressor in the second column of page 4, lines 72-74, but does not disclose details of such a control system. Pfleger ('494) further teaches pressure relief valve (23).

Allowable Subject Matter

20. Claims 19 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 571-272-1148. The examiner can normally be reached on 9:00 -5:30 Mon.-Fri..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


David L. Sorkin
Primary Examiner
Art Unit 1723

DLS